Attachment to TXX-98023

MAIN STEAM LINE ISOLATION VALVES

BASES

TECHNICAL SPECIFICATION (3/4.7.1.5)

Page Number	Description
B 3/4.7-7	This change revises the Technical Specification (TS) Bases discussion of surveillance 4.7.1.5 to delete the implication that the Main Steam Isolation Valves (MSIVs) should not be partial stroke tested at power. Also the implicit statement that full stroke testing is always performed in Mode 3, is revised to read "allowed" to be conducted in Mode 3. In addition, a sentence which indicated that an exemption to ASME B&PV Code, Section XI is required to not perform full stroke testing at power is deleted.

Justification

The current wording for the Bases of Surveillance Requirement 4.7.1.5 implies that partial stroke testing of the MSIVs should not be performed at power. CPSES MSIVs are designed for partial stroke testing and are required to be partial stroke tested quarterly by the IST Program. Also the IST procedure for full stroke testing is allowed in Modes below Mode 2 and does not require it to be performed in Mode 3. The wording requiring revision was taken from the generic NUREG-1431 Bases and was included with the Bases accompanying a recently approved TS change associated with extending the MSIV allowed outage times, License Amendment (LA) 54/40. While LA 54/40 was still under review by the NRC, this section of the Bases was revised to eliminate most of the confusing words as part of the process to convert the TS to the improved TS. The revised wording was submitted to the NRC in the TS conversion submittal, License Amendment Request (LAR) 97-01, however, LA 54/40 was not amended to reflect the revised wording at that time. This change updates the current TS.

The 1989 edition of ASME B&PV Code, Section XI permits quarterly partial stroke testing in lieu of quarterly full stroke testing (full stroke testing is only required during shutdown every 18 months) without requiring an exemption.

PLANT SYSTEMS

BASES

3/4.7.1.5 MAIN STEAM LINE ISOLATION VALVES

SR 4.7.1.5 (Continued)

accident and containment analyses. This Surveillance is normally performed upon returning the unit to operation following a refueling outage. ~~The MSIVs should not be tested at power, since even a part stroke exercise increases the risk of a valve closure when the unit is generating power. As the MSIVs are not tested at power, they are exempt from the ASME Code, Section XI, requirements during operation in MODE 1 or 2.~~

The Frequency is in accordance with the Inservice Testing Program pursuant to Specification 4.0.5.

allowed to be

This test is conducted in MODE 3 with the unit at operating temperature and pressure. This SR is modified by a Note that provides exemption from Specification 4.0.4 for entry into MODE 3. This allows a delay of testing until MODE 3, to establish conditions consistent with those under which the acceptance criterion was generated.

REFERENCES

1. 10 CFR 100.11.

3/4.7.1.6 MAIN FEEDWATER ISOLATION VALVES

The feedwater isolation valves, the feedwater isolation bypass valves, and the feedwater preheater bypass valves are designed to close on a Feedwater Isolation Signal to 1) limit the cooldown following a safety injection/reactor trip, and 2) limit the mass addition to the containment on a steamline break inside containment, and 3) limit the severity of feedwater malfunctions which result in over feeding of a steam generator. The allowed outage times and required actions are consistent with normal plant operating requirements and the safety functions of the valves.

3/4.7.1.7 STEAM GENERATOR ATMOSPHERIC RELIEF VALVES

The OPERABILITY of the steam generator atmospheric relief valves (ARVs) ensures that reactor decay heat can be dissipated to the atmosphere in the event of a steam generator tube rupture and loss of offsite power and that the Reactor Coolant System can be cooled down for Residual Heat Removal System operation. Two ARVs are required to cool the Reactor Coolant System in a time frame compatible with prevention of overfill of the faulted steam generator. All four ARVs are required to be OPERABLE to allow for not being able to use the ARV on the faulted steam generator and an active failure of one of the remaining three ARVs.

3/4.7.2 STEAM GENERATOR PRESSURE/TEMPERATURE LIMITATION

The limitation on steam generator pressure and temperature ensures that the pressure-induced stresses in the steam generators do not exceed the maximum allowable fracture toughness stress limits. The limitations of 70°F and 200 psig are based on a steam generator RT_{NDT} of 60°F and are sufficient to prevent brittle fracture.